Applications of Variable Polarization in Soft X-Ray Microscopy and Spectroscopy for Magnetism and Magnetic Materials Research

October 7 – 8, 2003

Organizers: Elke Arenholz and Tony Young

The workshop will focus on current and anticipated future frontiers in magnetism and magnetic materials research and how polarization dependent soft x ray microscopy and spectroscopy can contribute to improve our understanding of magnetism. We hope to discuss the development of new magnetic materials, recent accomplishments in magnetism research, and the development of new instrumentation for the study of magnetism using soft x rays.

Tuesday, October 7th, 2003

1:15 Welcome

1:20 Frank de Groot (Utrecht University, Netherlands)
On how to understand your spectra:
Theoretical aspects of polarization dependent spectroscopy

2:00 Ian Fisher, Stanford University
New materials: layered tellurides and copper borates

2:30 Yuri Suzuki, UC Berkeley
Half Metallic Oxide Materials and Spin-Polarized Transport

3:05 Coffee Break

3:20 Bruce Terris, Hitachi Global Storage Technologies
Nanomagnets for Data Storage

3:55 Jinghua Guo, Advanced Light Source
Magnetic dichroism in soft x-ray emission:
How hard the soft x-ray can be?

4:30 John Freeland, Advanced Photon Source
What Does An Injected Spin Think of Interface Morphology and Induced Semiconductor Moments

5:05 **Soren Prestemon**, Lawrence Berkeley National Laboratory
New Magnets – What is possible ?

5:30 **Adjourn**

Wednesday, October 8th, 2003

8:30 **Jeff Kortright**, Lawrence Berkeley National Laboratory
TBA

9:05 **Simone Raoux**, IBM Almaden
XMCD on magnetic nanoparticle assemblies

9:30 **Andreas Scholl**, Advanced Light Source
Magnetic structure, magnetization dynamics and beyond?
Some thoughts about what is "hot" today and will be tomorrow

10:05 **Coffee Break**

10:20 **Peter Fischer**, Max Plank Institut für Metallforschung, Germany
Full-field magnetic transmission soft X-ray microscopy:
challenges, facts, trends

10:55 **Yves Acremann**, Stanford Synchrotron Radiation Laboratory and
Tony Warwick, Advanced Light Source
Exciting Developments in Magnetic Scanning X ray Microscopy

11:30 **Jan Lüning**, Stanford Synchrotron Radiation Laboratory
And how about Imaging of Magnetic Domains by Resonant Scattering of
Coherent Soft-X-Rays?

12:05 **Karine Chesnel**, Advanced Light Source
Speckles from Magnetic Nanostructures

12:30 **Adjourn**